

MUFI HANNEMANN
MAYOR

DEPARTMENT OF TRANSPORTATION SERVICES
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 3RD FLOOR
HONOLULU, HAWAII 96813
Phone: (808) 768-8305 • Fax: (808) 768-4730 • Internet: www.honolulu.gov

WAYNE Y. YOSHIOKA
DIRECTOR

SHARON ANN THOM
DEPUTY DIRECTOR



May 21, 2010

RT2/09-297854R

Mr. Frank Genadio
92-1370 Kikaha Street
Kapolei, Hawaii 96707

Dear Mr. Genadio:

Subject: Honolulu High-Capacity Transit Corridor Project
Comments Received on the Draft Environmental Impact Statement

The U.S. Department of Transportation Federal Transit Administration (FTA) and the City and County of Honolulu Department of Transportation Services (DTS) issued a Draft Environmental Impact Statement (EIS) for the Honolulu High-Capacity Transit Corridor Project. This letter is in response to substantive comments received on the Draft EIS during the comment period, which concluded on February 6, 2009. The Final EIS identifies the Airport Alternative as the Project and is the focus of this document. The selection of the Airport Alternative as the Preferred Alternative was made by the City to comply with the National Environmental Policy Act (NEPA) regulations that state that the Final EIS shall identify the Preferred Alternative (23 CFR § 771.125 (a)(1)). This selection was based on consideration of the benefits of each alternative studied in the Draft EIS, public and agency comments on the Draft EIS, and City Council action under Resolution 08-261 identifying the Airport Alternative as the Project to be the focus of the Final EIS. The selection is described in Chapter 2 of the Final EIS. The Final EIS also includes additional information and analyses, as well as minor revisions to the Project that were made to address comments received from agencies and the public on the Draft EIS. The following paragraphs address comments regarding the above-referenced submittal:

As stated in Section 2.2.3 of this Final EIS, the NEPA Notice of Intent requested input on five transit technologies. A technical review process that included the opportunity for public comment was used in parallel with the alignment analysis to select a transit technology. The process included a broad request for information that was publicized to the transit industry. Transit vehicle manufacturers submitted 12 responses covering all of the technologies listed in the Notice of Intent. Rubber tire on concrete systems, such as the Phileas system, were

evaluated by a five-member panel appointed by the City Council that considered the performance, cost, and reliability of the proposed technologies. The panel accepted public comment twice as part of its review. By a four-to-one vote, the panel chose a steel wheel operating on steel rail system. The four panel members selected steel-wheel technology because it is mature, proven, safe, reliable, economical, and non-proprietary. Proprietary technologies, meaning those technologies that would have required all future purchases of vehicles or equipment to be from a single manufacturer, were eliminated because none of the proprietary technologies offered substantial proven performance, cost, and reliability benefits compared to steel wheel operating on steel rail. Selecting a proprietary technology also would have precluded a competitive bidding process, likely resulting in increased overall project costs. The panel's findings were summarized in a report to the City Council dated February 22, 2008.

Magnetic levitation and monorail require a different guideway design that would have different impacts from a steel wheel on steel rail system. The guideway design and the impact analysis are being completed for the steel wheel on steel rail technology that will be used for the Project. As previously stated, other forms of fixed rail were eliminated in the scoping process and analysis of impacts to properties has been conducted for the steel wheel on steel rail technology chosen for the Project.

No comparative magnetic levitation project has ever been built within the U.S. Therefore, no data is available to support a cost estimate. Some of the savings recognized in other countries for beam-track vehicles would not apply in the U.S. because of requirements to include an emergency egress walkway. Also, the smaller structures proposed in the comment result in shorter span-lengths, which increases the number of columns required and the cost to construct both the additional foundations and columns.

The HSST system operators have declined to make operating expenses available. Thus, with no comparative data available to support an operating cost estimate, there is no means to verify this statement regarding maglev's operating and maintenance costs compared to steel wheel.

There is no plan to implement express service, but if future operations indicate that it would be beneficial, the system could operate in skip-stop service. With the Project, trains will operate every 3 minutes in each direction during peak periods. Once on the system, it will take 42 minutes to travel from East Kapolei to Ala Moana Center. Skip-stop service could decrease travel time by a few minutes. The system will be capable of fully automated operation.

The following paragraphs address your Specific Comments on the Draft EIS:

7 Purpose of the Draft EIS: DTS and FTA requested information during scoping that would inform the technology selection process. No new meaningful information was received. As discussed previously, an open technology selection process was conducted during development of the Draft EIS in February 2008 and multiple panel meetings were held that were open for public comment as part of the review. The Final EIS documented the selection in Section 2.2.3.

8 Purpose of the Draft EIS: The Final EIS has been revised to address the identification of the Airport Alternative as the preferred alternative, in particular see Section 2.4, Preferred Alternative Identification Process.

S-4 Alternatives Considered: The City Council never enacted a technology selection bill resulting in the City accepting the findings of the panel. The suggested text edit in this comment has not been deleted from the Final EIS.

S-7 Noise and Vibration: Noise impacts and mitigation are evaluated for the steel wheel on steel rail technology. Parapet walls, wheels skirts, and sound absorptive materials are included in the project costs in Chapter 6 of the Final EIS. The suggested text edit in this comment has not been incorporated into the Final EIS.

2-3 2.1.1 Screening: Fixed guideway is not an emerging rail concept. The proposed language was not added because it does not provide any additional clarity regarding the guideway as a rail concept.

2-7 Table 2-2 Alternatives: As stated previously, proprietary technologies, meaning that selecting one of those technologies would require all future purchases of vehicles or equipment to be from a single manufacturer, were eliminated for good cause. These were eliminated because none of the proprietary technologies offered proven performance, cost, and reliability benefits compared to steel wheel on steel rail. The text has not been revised in the Final EIS.

2-8 2.1.3 Alternatives Consideration: The single operating urban magnetic levitation system has a maximum speed of 100 kilometers per hour (62 miles per hour) which is similar to the maximum operating speeds of 50 to 60 miles per hour for steel wheel on steel rail systems. While the system is quieter, other systems may be designed to match the noise level of magnetic levitation when in operation. There is no safety improvement from the traction design. The assumed visual and cost savings benefits for beam-track vehicles would not apply in the U.S. because of requirements to include an emergency egress walkway. Also, the smaller structures result in shorter span-lengths, which increases the number of columns required and the percentage of views blocked by support structure. In addition, the greater number of columns required increases the cost to construct both the additional foundations and columns. No comparative project has ever been built within the U.S. Therefore, no data is available to support a cost estimate. With no comparative data available to support an operating cost estimate, there is no means to verify this statement. The HSST system operators have declined to make operating expenses available. Thus, with no comparative data available to support an operating cost estimate, there is no means to verify this statement.

2-9 2.2 Alternatives Evaluated in the EIS: The Final EIS has been revised to reflect the identification of the Airport Alternative as the Preferred Alternative.

2-9 2.2 Build Alternatives: The system will use steel wheel on steel rail technology. Therefore, the EIS will not be revised as requested.

Mr. Frank Genadio
Page 4

2-9 2.2.2 Build Alternatives: *The Leeward Community College Station will be at-grade independent of where the maintenance and storage facility site constructed.*

2-19 End of second paragraph on left: *The correction has been made in Chapter 2 of the Final EIS and the sentence now reads "...assumed to be in place..."*.

2-19 Transit Technology: The suggested wording was not changed because the steel wheel on steel rail is the technology analyzed in the Final EIS.

2-20 Figure 2-9: The suggested changes were not made because the steel wheel on steel rail is the technology analyzed in the Final EIS.

2-38 Vehicle Maintenance and Storage Facility: Earthwork is included in the project cost estimate that is in the basis for Chapter 6 of the Draft and Final EISs.

3-27 Figure 3-9: This figure has been revised and now appears as Figure 3-7, A.M. Peak-Period Transit Travel Times by Travel Market—Existing Conditions, No Build Alternative, and the Project, in this Final EIS. This figure shows that the fixed guideway system will provide travel time benefits during the a.m. two-hour peak period. This figure represents travel times from origin to destination. Station-to-station travel time is provided in Table 3-16, Fixed Guideway Station-to-Station Travel Times, in this Final EIS. Trains will operate every 3 minutes in each direction during peak periods. Once on the system, it will take 42 minutes to travel from East Kapolei to Ala Moana Center. All trains are anticipated to stop at all stations. Skip-stop service would not provide substantially improved travel times for most users and could be a source of confusion for some riders; however, skip-stop service could be implemented if warranted.

3-39 Table 3-21: The suggested changes for Table 3-21, Column Placement Effects on Streets and Highways, were not made because the steel wheel on steel rail is the technology analyzed in this Final EIS.

3-42 Table 3-23: The suggested changes for Table 3-23, Effects on Traffic near Park-and-Ride Facilities and Bus Transit Centers—Existing Conditions, No Build Alternative, and the Project (without and with mitigation), were not made because the steel wheel on steel rail is the technology analyzed in this Final EIS.

3-50 Construction Phasing: Section 3.5.7, Mitigation of Construction-Related Effects, was revised in the Final EIS to reflect the identification of the Airport Alternative as the Preferred Alternative.

4-5 Table 4-1: The suggested changes for acquisitions, displacements, and relocations (Table 4-1, Summary of Direct Environmental Effects and Mitigation Measures to Avoid, Minimize, or Reduce Impacts) were not made because the steel wheel on steel rail is the technology analyzed in this Final EIS.

4-5 Table 4-1: The impacts to community services and facilities were only analyzed for the technology of steel on steel rail. The suggested changes were not made to Table 4-1, Summary of Direct Environmental Effects and Mitigation Measures to Avoid, Minimize, or Reduce Impacts.

4-8 Table 4-1: The noise and vibration analysis conducted for this project only applies to steel on steel rail and were not conducted, nor will be conducted for other types of rail. The

suggested changes were not made to Table 4-1, Summary of Direct Environmental Effects and Mitigation Measures to Avoid, Minimize, or Reduce Impacts.

4-9 Table 4-1: Steel on steel technology is the chosen technology for this project. Impacts to street trees were only analyzed regarding the impacts from this technology. The suggested changes were not made to Table 4-1, Summary of Direct Environmental Effects and Mitigation Measures to Avoid, Minimize, or Reduce Impacts.

4-33 Cemeteries: The sentence under the Cemeteries heading in Section 4.5.2, Affected Environment [Community Services and Facilities] has been revised in this Final EIS to correctly state, "One cemetery near Aloha Stadium and one near Waimano Home Road are adjacent to the project alignment."

4-36 Airport Alternative: The correction for Hickam Air Force Base has been made in Section 4.5.3, Environmental Consequences and Mitigation [Community Services and Facilities] of this Final EIS.

4-39 4.5.2: The term "White" is used in the Final EIS, which is consistent with usage by the U.S. Department of Transportation's Order 5610.2 and the U.S. Census Bureau.

4-42 Table 4-8: The terms used in this Final EIS are consistent with usage by the U.S. Department of Transportation's Order 5610.2 and the U.S. Census Bureau.

4-45 Ala Moana-Kakaako: The sentence under Ala Moana-Kakaako heading in Section 4.6.3, Environmental Consequences and Mitigation [Neighborhoods], of this Final EIS has been revised to state, "Kakaako has been designated a redevelopment area, which may result in a change in character along the Project alignment. However, substantial development has recently occurred in the neighborhood; several high-rise condominium developments have been built, and additional residential and commercial developments are planned. The elevated transit structure will not create a barrier to pedestrian or other modes of travel."

4-47 Regulatory Context: In Section 4.7.1, Background and Methodology [Environmental Justice] of this Final EIS, under the heading Regulatory Context, the sentence has been revised to state, "Additional laws, statutes, guidelines, and regulations that relate to EJ issues include the following..."

4-47 Defining Environmental Justice Areas: The term "Black" is used, which is consistent with usage by the U.S. Department of Transportation's Order 5610.2 and the U.S. Census Bureau.

4-51 Table 4-9: The terms used in Chapter 4 of this Final EIS are consistent with those defined by the U.S. Department of Transportation's Order 5610.2 and the U.S. Census Bureau.

As stated in Section 4.8, Visual and Aesthetic Conditions, of this Final EIS, the simulations are intended to represent the scale and spatial relationships of project elements to

other objects. These simulations serve several purposes: they were used to evaluate visual and aesthetic consequences, demonstrate the potential for mitigation, and provide a means of communicating the findings of the analysis. The simulations generally depict that the guideway (technology) would have a comparatively greater visual effect on the visual environment. The stations that were simulated for the visual assessment generally depict those that are expected to have a comparatively greater visual effect (see Figure 4-31 for the Chinatown Station and Figure 4-34 for the Downtown Station). Figure 2.12, Example Vehicle on Elevated Guideway (Cross-section) in this Final EIS, Section 2.5.2, Transit Technology, is a cross-section view that is intended to more accurately show the guideway dimensions. DTS has considered your request for additional station simulations. However, it was determined that the existing simulations presented in the Final EIS adequately represent the Project.

4-91 Salt Lake Alternative: The text related to views along Moanalua Stream does not require a change in the Final EIS since the Salt Lake Boulevard Alternative is not discussed in the Final EIS.

4-95 4.8.2: In regards to Section 4.9.2, Affected Environment [Air Quality], in the Final EIS, "Transportation Improvement Plan" is appropriate because it is in reference to the plan and the text will not be revised to "Program" in the Final EIS.

4-97 Figure 4-37: Noise impacts and mitigation were evaluated for the technology of steel wheel on steel rail. Because this is the transit technology analyzed in the document, it is appropriate to use the term "Rail" in Figure 4-51 Typical Sound Levels in the Final EIS.

4-100 and 4-101 Tables 4-15 and 4-16: The other three rail technologies are not being studied in the Draft or Final EIS. Related tables and figures have not been revised.

4-108 Electric and Magnetic Fields: Because magnetic levitation technology is not being considered as part of the Draft or Final EISs, the suggested changes have not been incorporated into the document.

4-137 Table 4-29: Magnetic levitation and monorail require a different guideway design that would have different impacts from a steel wheel on steel rail system. The guideway design and the impact analysis are being completed only for the steel wheel on steel rail technology that will be used for the project.

4-149 and 4-150 Table 4-32: Property names in this table refer to the names of historic properties listed in or determined eligible for listing in the National Register of Historic Places as identified in the Honolulu High-Capacity Transit Corridor Project Historic Resources Technical Report (RTD 2008o). Names used to identify historic properties in the National Register or in Section 106 documentation may not correlate with current names. Names may reflect previous uses and/or owners, or may relate to the property's historic significance, such as the CINCPAC Headquarters building. Accordingly, neither edit has been made to this Final EIS.

4-166 4.18.2: The Final EIS has been updated to include the recent changes in the TOD ordinance. The TOD ordinance is discussed in Section 4.19.2, Indirect Effects, of this Final EIS.

4-166 4.18.2: *Hunt Development Group was deleted from Section 4.19.2, Indirect Effects, of this Final EIS.*

4-171 Table 4-36: *Upon verification, Table 4-39, Planned and Foreseeable Actions in the Study Corridor, in the Final EIS has been updated and the reference DeBartolo has been deleted.*

5-3 5.2: *Section 2.1.3 of the Draft EIS explains that steel wheel on steel rail was the technology chosen for analysis. No other forms of rail are being analyzed in the Draft or Final EISs.*

5-3 5.3: *"Affects" has been changed to "effects" in the Final EIS, Section 5.4. The sentence now states, "...presents effects to these 81 historic resources, as established by current consultation."*

5-8 and 5-9 Table 5-2: *As discussed above, property names in this table refer to the names of historic properties listed in or determined eligible for listing in the National Register of Historic Places. "CINPACFLT" refers to the historic landmark. While the Commander may no longer be called, "Commander in Chief", the National Historic Landmark is listed as "CINCPAC".*

5-24 Measures to Minimize Harm: *The smaller structures proposed in the comment result in shorter span-lengths, which increases the number of columns required and the cost to construct both the additional foundations and columns. The proposed 120 to 150 foot span lengths would require a larger structure, similar to the steel wheel on steel rail system.*

6-3 Table 6-1: *Other technologies are not being studied in the Draft or Final EISs. Chapter 6 has not been revised to reflect other technologies.*

6-4 General Excise and Use Surcharge: *The amount of County General Excise and Use Tax (GET) Surcharge revenues withheld by the State has not been included in the revenue estimates. The surcharge collections are not being re-directed by the State. The Final EIS presents only information on funding that will go towards the Project.*

6-7 Fare Revenues: *The HSST technology was evaluated and rejected as expensive to build and costly to operate by a technical panel of experts in transit systems, as noted in Chapter 2 of the Draft EIS. The claims in the comment have not been substantiated by any revenue service operation. There are still too many elements of HSST technology that are not sufficiently developed or understood for the Honolulu community to adopt it as a primary transportation system. By contrast, steel wheel on steel rail technology is proven and cost-effective in today's transit industry.*

6-11 System Operation: *Comment noted. All operating costs include a driver, though the system will be designed to allow for automation. The decision to use an operator or not will be made at a later date.*

7-11 Important Trade-offs: The chapter has been revised to reflect selection of the Airport Alternative as the preferred alternative.

541 Appendix C: The suggested changes were not made to Draft EIS Appendix C, Construction Approach (Final EIS Appendix E Construction Approach) because steel wheel on steel rail is the selected technology that is being analyzed in the Draft and Final EIS.

596 Comment Sheet: The comment from the Hawaii State Department of Transportation (HDOT) was in reference to phrasing in an early administrative draft of the EIS, which was changed in the Draft EIS. HDOT did not comment on the selection of a technology. As discussed in Section 2.2.3 of the Final EIS, a five-member panel appointed by the City Council and Mayor considered the performance, cost, and reliability of the proposed technologies. By a four-to-one vote, the panel selected steel wheel operating on steel rail as the technology for the Project because it is mature, proven, safe, reliable, economical, and non-proprietary. Technologies other than steel wheel on steel rail were eliminated for because they are proprietary technologies, meaning that selection of one of those technologies would require all future purchases of vehicles or equipment to be from a single manufacturer. These were eliminated because none of the proprietary technologies offered substantial proven performance, cost, and reliability benefits compared to steel wheel on steel rail.

1045 D.R. Horton Schuler: There is a single operating urban magnetic levitation system in the world, in Japan, and having opened for operation in 2004, has only five years of operating record. The technology is unproven.

1160 Frank Genadio: The energy mix for electricity generation of the system will depend on HECO's power production. As stated in Chapter 4, Section 4.11.3, Environmental Consequences and Mitigation [Energy and Electric and Magnetic Fields], the Project will consume approximately 1 to 2 percent of the total projected electricity generated on Oahu in 2030. The planned electricity generation capacity on Oahu will be sufficient to support the transit system, but the electricity distribution system will require various updates to support the system. Integration of photo-voltaic cells into project features could reduce net project electricity demand.

1494 Fixed Guideway Alternatives: DTS and FTA requested information during scoping that would inform the technology selection process. The information submitted was reviewed and incorporated into the selection process.

1502 Project Alternatives Analysis Report: Comments regarding the technology selection history are noted.

1571 Transit Advisory Task Force: The smaller structures proposed result in shorter span-lengths, which increases the number of columns required and the cost to construct both the additional foundations and columns. To match the Project's 120 to 150 foot span lengths and other requirements, such as an emergency walkway, the structure would be of similar size to the Project's.

1571 Transit Advisory Task Force: Comments regarding magnetic levitation are noted.

Mr. Frank Genadio
Page 10

1715 Transit Scoping Meeting Comments: Surface park-and-ride lots could include covers that could be used for photovoltaic cells. This will be considered during final design of the Project.

Appendix E City Correspondence: Scoping for the Draft EIS in March of 2007 requested comments on technologies. Selection of technology occurred during the Draft EIS process; the selection was conducted as an open process with multiple panel meetings open to the public during February 2008, and the Draft EIS documented the selection.

The FTA and DTS appreciate your interest in the Project. The Final EIS, a copy of which is included in the enclosed DVD, has been issued in conjunction with the distribution of this letter. Issuance of the Record of Decision under NEPA and acceptance of the Final EIS by the Governor of the State of Hawaii are the next anticipated actions and will conclude the environmental review process for this Project.

Very truly yours,

WAYNE Y. YOSHIOKA
Director

Enclosure